



VOSH PROGRAM DIRECTIVE: 12-403

ISSUED: June 6, 1997

**SUBJECT: Occupational Exposure to 1,3--Butadiene, General Industry, § 1910.1051;
Final Rule**

A. Purpose.

This directive transmits to field personnel the above-referenced standard.

This Program Directive is an internal guideline, not a statutory or regulatory rule, and is intended to provide instructions to VOSH personnel regarding internal operation of the Virginia Occupational Safety and Health Program and is solely for the benefit of the program. This document is not subject to the Virginia Register Act or the Administrative Process Act; it does not have general application and is not being enforced as having the force of law.

B. Scope.

This directive applies to all VOSH personnel.

C. Reference.

61 FR 56746 (November 4, 1996)

D. Cancellation.

Not Applicable.

E. Action.

The Deputy Commissioner, Directors and Managers shall assure that field personnel understand this Directive when ensuring compliance with the provisions of these standards.

F. Effective Date.

July 15, 1997

G. Expiration Date.

Not Applicable.

H. Background.

On August 10, 1990, OSHA proposed an eight-hour time-weighted average exposure limit of 2 ppm for BD with a 10 ppm short-term exposure limit. The proposal also included an “action level” of 1 ppm with requirements for medical surveillance and training. Hearings were held in January and February 1991 and OSHA received post-hearing comments until February 1992.

In late 1995, OSHA received an epidemiologic study from the synthetic rubber industry which demonstrated an excess risk of cancer among workers exposed to BD.

In January 1996, OSHA received joint labor-management recommendations to reduce BD exposure levels. These recommendations resulted from a negotiated rulemaking between federal OSHA and representatives of the United Steelworkers, the International Chemical Workers Union, the International Institute of Synthetic Rubber Producers, and the Chemical Manufacturers Association Olefins Panel.

On March 8, 1996, OSHA reopened the rulemaking record on BD to consider comments on whether OSHA should base its final standard on provisions outlined in the recommendations, particularly the lower PEL, STEL and action level.

On November 4, 1996, federal OSHA published these revisions in the *Federal Register*, with an effective date in federal jurisdictions of February 3, 1997.

On April 7, 1997, the Safety and Health Codes Board adopted the BD standard, along with various related amendments for Special Provisions for Air Contaminants, § 1910.19, Air Contaminants, § 1910.1000, and Appendix A of Gases, Vapors, Fumes, Dusts, and Mists, § 1926.55.

I. Summary.

This final regulation amends the 1971 standard regulating employee exposure to 1,3-Butadiene (BD), which is a colorless, odorless, flammable and carcinogenic chemical primarily used in the manufacture of synthetic rubber. Federal OSHA’s new limits reduce the permissible exposure limit (PEL) from concentrations up to 1,000 parts BD per million parts of air (1,000 ppm) as an eight-hour time-weighted average (TWA) to an 8-hour TWA of 1 ppm and a short term exposure limit (STEL) of 5 ppm for 15 minutes. An “action level” of 0.5 ppm as an 8-hour TWA is included in the standard as a mechanism for exempting an employer from some administrative burdens, such as employee exposure monitoring and medical surveillance, in instances where the employer can demonstrate that the employee’s exposures are consistently at very low levels. To reduce exposures and protect employees, the BD standard includes requirements such as engineering controls, work practices and personal protective equipment, measurement of employee exposures, training, medical surveillance, hazard communication, regulated areas, emergency procedures and recordkeeping.

The BD standard includes four informational appendices covering employee information and training, technical information on BD, medical screening and surveillance issues and OSHA’s sampling and analytical method and a mandatory appendix on respirator fit-testing procedures.

A unique feature of the standard is an exposure goal program which encourages employers to reduce exposures to the action level.

Theron J. Bell
Commissioner

E-Attachment: 61 FR 56746 (November 4, 1996)
[http://www.osha.gov/pls/oshaweb/owasrch.search_form?p_doc_type=FEDERAL_REGI
STER&p_toc_level=2&p_keyvalue=61&p_text_version=FALSE](http://www.osha.gov/pls/oshaweb/owasrch.search_form?p_doc_type=FEDERAL_REGI
STER&p_toc_level=2&p_keyvalue=61&p_text_version=FALSE)

Distribution: Commissioner of Labor and Industry
Deputy Commissioner
Directors and Managers
VOSH Compliance Staff
Cooperative Programs Staff
Legal Support Staff
OSHA Regional Administrator, Region III

Occupational Exposure to 1,3--Butadiene, General Industry, § 1910.1051;

As adopted by the
Safety and Health Codes Board

Date: April 7, 1997



VIRGINIA OCCUPATIONAL SAFETY AND HEALTH PROGRAM

VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY

Effective date: July 15, 1997

16 VAC 25-90-1910.1051, Occupational Exposure to 1,3-Butadiene, General Industry,
§ 1910.1051

When the regulations, as set forth in the final rule for Occupational Exposure to 1,3--Butadiene, General Industry, § 1910.1051, are applied to the Commissioner of the Department of Labor and Industry and/or to Virginia employers, the following federal terms shall be considered to read as below:

Federal Terms

VOSH Equivalent

29 CFR

VOSH Standard

Assistant Secretary

Commissioner of Labor and Industry

Agency

Department

February 3, 1997

July 15, 1997

Implementation Schedule

Adoption date

04/07/97

Effective date

07/15/97

Initial Monitoring
[1910.1051(d)(2)]

within 60 days of 07/15/97 or by 09/13/97

(f)(1) - Engineering controls

within 2 years of 07/15/97 or by 07/15/99

(g) - Exposure goal program

within 3 years of 07/15/97 or by 07/15/00

The following paragraphs of § 1910.1051 will take effect within 180 days of the effective date [01/11/98]:

(e) - Permissible Exposure Limits

(f) - Methods of compliance (excluding (f)(1) - engineering controls)

(h) - Respiratory protection

(i) - Protective clothing and equipment

(j) - Emergency situations

(k) - Medical screening and surveillance

(l) - Communication of BD hazards to employees

(m)- Recordkeeping